NASA Glenn Success Stories

Hybrid Power Management (GRC) Program Develops Long Life Highway Flasher



JME, Inc.

TECHNOLOGY

Hybrid Power Management (HPM) is the art of combining diverse power devices in an optimal configuration for space and terrestrial applications. The ultracapacitor has an extremely long life, excellent low temperature characteristics, and is rugged, reliable, and maintenance free. This is ideal for industrial signals and alarms.

COMMERCIAL APPLICATION

- ◆ Applications include power generation, transportation, biotechnology, and space power systems.
- ◆ Capacitors can replace standard batteries as a back-up to solar cells in highway flashers

SOCIAL / ECONOMIC BENEFIT

- ◆ HPM has the potential to significantly alleviate global energy concerns, improve the environment, and stimulate the economy.
- ◆ Maintenance free
- ◆Highly reliable
- ◆ Capacitors have an indefinite life for use in highway flashers
- ◆ Capacitors are made from environmentally green materials, eliminating the need for disposal of lead acid batteries



Highway flashers can be greatly improved through the application of Hybrid Power Management (HPM).

NASA APPLICATIONS

◆ HPM provides reliable, long life energy storage systems essential for aeronautic and deep space missions. HPM also provides safe energy storage for drop tower research.